

Amendments to the Specification

Please replace the first paragraph, lines 6-9 at page 1 of the specification with the following:

This application is a continuation-in-part of patent application Serial No. ~~09/302,986~~ 09/302,896, filed April 30, 1999, now U.S. Patent No. 6,866,842, issued March 15, 2005, which claims ~~priority to~~ benefit of provisional patent application U.S. Serial No. 60/083,917, filed May 1, 1998.

Please replace the paragraph at page 14, lines 25-31, continuing at page 15, lines 1-8, with the following:

Cells isolated from primary muscle tissue contain mixture of fibroblasts, myoblasts, adipocytes, hematopoietic, and muscle-derived progenitor cells. The progenitor cells of a muscle-derived population can be enriched using differential adherence characteristics of primary muscle cells on collagen coated tissue flasks, such as described in ~~patent application U.S. Serial No. 09/302,896~~ U.S. Patent No. 6,866,842 of Chancellor et al. Cells that are slow to adhere tend to be morphologically round, express high levels of desmin, and have the ability to fuse and differentiate into multinucleated myotubes (~~U.S. Serial No. 09/302,896~~ U.S. Patent No. 6,866,842 of Chancellor et al.). A subpopulation of these cells was shown to respond to recombinant human bone morphogenic protein 2 (rhBMP-2) *in vitro* by expressing increased levels of alkaline phosphatase, parathyroid hormone dependent 3', 5'-cAMP, and osteogenic lineage and myogenic lineages (~~U.S. Serial No. 09/302,896~~ U.S. Patent No. 6,866,842 of Chancellor et al.; T. Katagiri et al., 1994, *J. Cell Biol.*, 127:1755-1766).

Please replace the paragraph at page 28, lines 30-31, continuing at page 29, lines 1-23, with the following:

Enrichment and isolation of MDC: MDC were prepared as described (~~patent application U.S. Serial No. 09/302,896~~ U.S. Patent No. 6,866,842 of Chancellor et al.). Muscle explants were obtained from the hind limbs of a number of sources, namely from 3-week-old mdx (dystrophic) mice (C57BL/10ScSn mdx/mdx, Jackson Laboratories), 4-6 week-old normal female SD (Sprague Dawley) rats, or SCID (severe combined immunodeficiency) mice. The muscle tissue from each of the animal sources was dissected to remove any bones and minced into a slurry. The slurry was then digested by 1 hour serial incubations with 0.2% type XI collagenase, dispase (grade II, 240 unit), and 0.1% trypsin at 37°C. The resulting cell suspension was passed through 18, 20, and 22 gauge needles and centrifuged at 3000 rpm for 5 minutes. Subsequently, cells were suspended in growth medium (DMEM supplemented with 10% fetal bovine serum, 10% horse serum, 0.5% chick embryo extract, and 2% penicillin/streptomycin). Cells were then preplated in collagen-coated flasks (~~patent application U.S. Serial No. 09/302,896~~ U.S. Patent No. 6,866,842 of Chancellor et al.). After approximately 1 hour, the supernatant was removed from the flask and re-plated into a fresh collagen-coated flask. The cells which adhered rapidly within this 1 hour incubation were mostly fibroblasts (Z. Qu et al., supra; ~~application U.S. Serial No. 09/302,896~~ U.S. Patent No. 6,866,842 of Chancellor et al.). The supernatant was removed and re-plated after 30-40% of the cells had adhered to each flask. After approximately 5-6 serial platings, the culture was enriched with small, round cells, designated as PP6 cells, which were isolated from the starting cell population and used in further studies. The adherent cells isolated in the early platings were pooled together and designated as PP1-4 cells.